

Miscellaneous.

SPONTANEOUS COMBUSTION OF GUANO.—In our impression of the 28th of last September, we stated on the authority of Professor Buckland, that two churches in Italy had been destroyed by fire, in consequence of so accumulation of guano in their towers. This statement was at the time considered by many well-informed persons to be extremely doubtful. The following account of the destruction of a ship, which we extract from the *Hull Packet* of last week, will go far towards proving at least the possibility of such a catastrophe.—"The steam-packet *Waterwitch*, arriving at Hull from London, on the 15th inst., brought into port the master and crew of the barque *Ann*, Storey, of Sunderland, who had been picked up by the packet in an open boat, to which they had taken on the destruction of their vessel near Husbrough Sand, on Tuesday evening. It appears by the statement of the shipwrecked men that the *Ann*, a new barque, on the first voyage, was returning from Ichnaboe with a cargo of guano, and unfortunately struck on the sand, and, while beating over, shipped a quantity of salt water, which, penetrating the cargo, caused almost instantaneous combustion. A volume of smoke rising through the fore hatchway warned the crew of this new danger, and induced their taking immediately to the boat, without saving any thing but themselves; and scarcely had they done so, when a tremendous explosion of the gas, engendered by the partially-fired guano, blew the stern out of the vessel, which then filled, and sank in deep water."

FALL OF A HOUSE AT LIMERICK.—A most appalling and fatal accident occurred in Limerick last Sunday night. A woman named Shanessy, resident in Sheep-street, off Athluskard-street, had died in the morning, and her husband, conceiving he had not sufficient room to wake the corpse in his own house, applied to a man named Mason, who lived opposite, for the use of the upper part of his house for the purpose. Mason, knowing the rottenness of the timbers, and fearing the consequences, strongly objected. Even the mother of deceased, offered her house, which had no lofts, and where no accident could have occurred. But all was of no avail, Shanessy persisted in having the wake at Mason's. The house consisted of three stories, and the upper attic one being unoccupied, the wake was held there. A large number of women and two men were collected in the evening, when, about 8 o'clock, the floor gave way in the centre, and the entire were precipitated to the floor beneath, which also gave way, and all came to the under floor or kitchen with a tremendous crash and wild shriek, which was heard at the distance of several streets. By this melancholy accident eleven persons were killed and from sixteen to twenty grievously maimed—some with legs and arms broken, skulls fractured, and one man had his back broken.

PUBLIC NURSERIES FOR CHILDREN.—An Institution has been opened in Glasgow for the reception of children, from one to four years of age, belonging to the working classes, and is calculated to be of great service. A large building has been taken in an open part of the city, furnished with an extensive green and play-ground for the recreation of the children. The *Glasgow Examiner* says, "the ground floor contains a large kitchen, and a hall in which the juvenile community are assembled at meal hours. On the next floor there is a range of sleeping apartments, furnished in a plain, but neat and comfortable manner, and a room in which the children are tended by nurses, and, if competent, taught some useful lesson by means of drawings or pictures similar to those used in infant schools. The inmates are from one to four years of age. Some of them, whose mothers are employed during the day, remain in the institution from seven in the morning till the same hour in the evening. During that time they are carefully attended and supplied with nutritious food for the trifling sum of twopence. Others, such as orphans, receive, in addition, comfortable lodging at night, for the same insignificant sum. Every thing, in short, is done, and done faithfully, 'to supply, as far as possible, the place of the absent parent,' and this is abundantly manifested by the appearance of the children, who seem contented, happy, and comfortable."

HEATING GREEN-HOUSES.—At the Hope Nursery, Leeming-lane, Bedale, is a small propagating-house, which is heated in an ingenious manner. The top of the furnace of the stove having been removed, it was replaced by a small boiler, from which two iron pipes, of 1½ inch in the bore, proceed in the usual way, pass in the propagating-house, and enter what may be called the propagating-box, the one at the top near the front corner, the other near the bottom of the back corner; the box occupies a pit having a path before and behind; it is three inches in depth in the inside, and is formed of 1½ inch deal, having a division up the centre for the circulation of water; the top is covered about three inches in depth with sand, there being an edging of wood that height all round, and in this the pots are plunged. The temperature of the house is kept up by zinc pipes, which issue from the front of the box at the corner near where the flow iron pipe enters. The whole is found to answer very well, especially in autumn and spring, when heat is most required; it is all gained heat. A span-roofed house here is glazed in a peculiar manner; the glass, after being placed on a bedding of putty in the usual way, is not put down, but painted with white lead of the consistence of rather thick paint; two or three coats of this are said to answer admirably; the white lead does not give way and peel off as putty often does.—*Correspondent of Gardener's Chronicle.*

FIRE ANNIHILATOR.—Dr. Ryan, of the Polytechnic Institution, has recently delivered a lecture "On Fire," for the purpose of explaining an apparatus lately invented by Mr. Phillips, of Bloomsbury-square, called the "Fire Annihilator." After explaining the phlogiston theory of the earlier chemists, and the more modern views of Lavoisier and others, the lecturer proceeded to prove, that combustion under all circumstances is the result of chemical action. A considerable portion of his lecture was afterwards devoted to the consideration of supporters and non-supporters of combustion, or to those conditions which are necessary either to maintain fire or to prevent its action; he more especially pointed out the effect of volumes of free nitrogen or free carbonic acid upon the flame of coal gas; and, after showing that combustion instantly ceased in an atmosphere containing but a small percentage of these gases, he proceeded to explain that Mr. Phillips used a mixture of coke, nitre, and sulphate of lime, with a little water—the products of its ignition were principally free nitrogen, carbonic acid, and water vapour. To illustrate the office of the apparatus, which for a large house is only the size of a small stove, Dr. Ryan kindled a fire of patent wood, to which he added about half a pint of spirits of turpentine in an iron house; when the flame was at its height, he introduced a small apparatus, holding not more than two ounces of his material, and in half a minute the fire was completely extinguished. As the apparatus is small, and may be kept charged, requiring only the action of a trigger, on the alarm of fire it may be carried to any part, and immediately used. It will prove of vast utility in ships, as it may be placed in the hold, and on an alarm of fire, the trigger may be pulled, and the gas will escape, thus putting a stop to the ravages of the devouring element.

The new bridge at Besons, over the Seine, composed of seven arches of 80 feet span each, has been opened to the public. It is said to be a remarkably light and elegant construction in iron, built according to Mr. Neville's system of horizontal trussed girders, and was completed in six months.

ARTESIAN WELLS IN AFRICA.—M. Fournel has suggested to the Paris Academy of sciences, that by sinking artesian wells it would be practicable to have a constant and abundant supply of water throughout the whole extent of the desert.

STATUE TO SIR H. FLEETWOOD.—The inhabitants of Fleetwood are about to erect a statue to Sir H. Fleetwood, the founder of the town, and originator of the Preston and Wyre railway.

NEW PLASTER.—A new plaster has been invented by a lady named Marshall. It is said to dry with great rapidity, to present a good surface for painting, and to be cheap.

THE ROYAL EXCHANGE.—The merchants of London have felt themselves so seriously inconvenienced by some of the peculiarities of the Royal Exchange, that a petition, of which the following is a summary, has been presented to the Gresham Committee:—"The undersigned merchants of the city of London are of opinion that, in the construction of the new Royal Exchange, sufficient attention has not been paid to the comfort of those who attend the same, and beg most respectfully to submit to the Gresham Committee the following alterations, which are necessary before they can assemble there without danger to their health and personal comfort. The alterations suggested are—1. That the area be covered in. 2. That some remedy be provided to remove the cold damp from the pavement. 3. That a remedy be also provided to protect them from the currents of air." The above petition has been signed by Messrs. Barings, Rothschilds, Heath, Morris Prevost, Duxat and Co., Lemme and Co., and some hundreds of the first firms in the city. After much discussion in Committee, the clerk was directed to communicate to the memorialists, "That in the month of September, in the year 1834, before the Gresham Committee took any steps whatever as to the erection of a new building, they applied by circular to most of the leading merchants and brokers, requesting their opinion as to whether the new Exchange should be a covered hall or partially open, as in the original Exchange of Mr. T. Gresham, and in the one recently destroyed; that besides, the committee took every opportunity, by personal inquiry, of ascertaining the wishes of their fellow-citizens on the subject; that the result of the circular and of these inquiries was, that a large majority wished the Exchange to be partially open, as heretofore, alleging the great noise in the Bourse at Paris, and the necessity for ventilation of the most free kind; as their reasons for the decision; that in consequence of this determination they directed a part of the merchants' area to be left uncovered as before, but that, for greater shelter, they further directed that the covered space should be increased from one-half (the proportion of the space covered in the late building), to two-thirds, and that the architect of the present edifice had strictly followed out these instructions; and for these reasons the committee could not comply with the wishes of the merchants; that with regard to currents of air, the committee had directed such inner doors to be put up at the north and south entrances as might check the draughts, at the same time providing that such doors should not interfere with the extensive uses of the area of the Exchange as a thoroughfare to all the neighbouring streets, the Bank, the Stock Exchange, and the other important public and private buildings of the neighbourhood."

THE QUICKSAND UNDER THE NEW HOUSES OF PARLIAMENT.—Our readers may not be generally aware that the foundations of the new Westminster Palace actually float on a quicksand. Westminster Hall and the old palace for many centuries (upwards of eight) have done the same, so there would seem to be no reason for apprehension. This quicksand unless confined, has a tendency to rise, spread, and shift itself. It is thoroughly surrounded by walls of solid concrete, and above it, keeping it down like the cork of a bottle, is a deep nest of concrete. The foundation, however, of the Victoria or Record Tower, as it is called, has passed through the quicksand; because of the great weight the tower will have to sustain, a very ticklish operation was performed last week near the ventilating shaft of the present houses. To prepare for new buildings, it was necessary to excavate immediately close to this shaft, and even below it. The workmen proceeded, almost inch by inch, stopping down the quicksand the instant it began to rise. Fears were entertained for the safety of the shaft, which weighs 200 tons, but no accident whatever happened. The danger is passed, and the works are nearly done. It was curious to see the excavations exhibiting at once the old and new Houses of Lords and Commons, Westminster Hall, the crypt of St. Stephen's, the foundation of the ventilating shaft, &c.—*The Bristol Mirror.*

A CEMEYRY AT HULL is talked of, and a public meeting is to be called to consider the proposition.